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REMARKS

The present application was originally filed with 28 Claims. In a Preliminary Amendment mailed July 17, 2001, Claims 2, 3, and 14-28 were cancelled without prejudice and Claims 29 and 30 were added. Thus, Claims 1, 4-13, 29 and 30 were pending. In a Restriction Requirement mailed September 27, 2002, the Examiner restricted the Claims into two Groups, with Claims 1, 4-10 and 29-30 in Group I, and Claims 11-13 in Group II. In a Response filed on October 9, 2002, Applicants elected the Claims in Group I with traverse, and cancelled Claims 11-13. Thus, Claims 1, 4-10 and 29-30 were pending in the present application. In a Response filed June 13, 2003, and a subsequent Response filed February 13, 2004, Applicants amended Claim 1 and cancelled Claims 9, 10, 29, and 30, without prejudice. Applicants reserve the right to pursue the originally filed, similar and/or broader claims in one more subsequently filed applications.

In the present Office Action, Applicants appreciatively note that the Examiner indicates that Claims 34-39 are allowed. The Examiner indicates in the present Office Action that upon further consideration, Claims 1 and 31, with the limits of Claim 6 incorporated herein are not deemed patentable. The Examiner has set forth one rejection in the present case, with Claims 1, 5, 7 and 31-33 being rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Grieve et al. (6,060,281) in view of Landry et al. (WO 99/06061).

In particular, the Examiner argues that "Grieve et al. teach that phospholipases from parasitic helminths are desirable proteins to be used as the immunogenic components of vaccines Grieve et al teach that when administered, it is desirable to induce both humoral (B-cell) and cellular (T-cell) responses (col. 29, lines 13-24). " (Office Action, pages 2-3). The Examiner further argues that "[i]n any event Landry et al teach that one would be motivated to enhance the immunogenicity of any existing T-cell epitopes (page 28 line 4). It is thus considered that one would have been led to modify the phospholipase immunogens of Grieve et al by applying the T-cell epitope enhancing methodology of Landry et al." (Office Action, page 3).

Applicants must respectfully disagree with the Examiner's arguments. While Applicants agree that Grieve et al. teach that it desirable to induce both humoral and cellular responses against parasites, Applicants respectfully submit that neither the Grieve et al. nor the Landry et al. reference render the presently claimed invention unobvious under 35 U.S.C. §103(a). Indeed, as discussed below, Landry et al. is not a proper prior art reference. Should the Examiner argue that Grieve et al. is prior art under 35 U.S.C. §102(e), Applicants respectfully submit that in contrast to the presently claimed invention, there is no teaching in the Grieve et

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al. reference of modifying T-cell epitopes of polypeptide of interest (i.e., an enzyme) to produce a variant enzyme that produces an immunogenic response in an individual that is greater than the immunogenic response produced by the polypeptide of interest (i.e., an enzyme). Thus, as Grieve et al. does not teach each and every element of the presently claimed invention, it is not a proper prior art reference under 35 U.S.C. §102(e). Furthermore, as there is no teaching nor suggestion in the Grieve et al. reference of modifying T-cell epitopes of polypeptide of interest (i.e., an enzyme) to produce a variant enzyme that produces an immunogenic response in an individual that is greater than the immunogenic response produced by the polypeptide of interest (i.e., an enzyme), the presently claimed invention is obvious over the Grieve et al. reference.

With regard to the Landry et al. reference, Applicants respectfully submit that this reference is NOT prior art. The present application claims priority to co-pending U.S. Patent Application Serial Number 09/500,135, which was filed on February 8, 2000. This "parent" application provides disclosure of altered proteins which are modified at a T-cell epitope and that exhibit a greater immune response that the original protein (See e.g., page 5, lines 9-10; page 6, lines 8-10; and page 14, lines 13-14). In addition, this parent application provides support for the use of modified epitopes for production of vaccines (See e.g., page 5, lines 14-25; page 6, lines 11-13; and page 15, lines 5-9, and 13-15). Thus, the presently claimed subject matter of Claims 1, 5, 7, and 31-39, is entitled to the priority date of parent application serial number 09/500,135. Because the parent application was filed less than one year after the publication of the Landry reference, the Landry et al. reference is not a statutory bar under 35 U.S.C. §103(a). As indicated in the accompanying Declaration of David Estell and Fiona Harding, filed herewith, the claimed subject matter was invented prior to the publication date of the Landry et al. reference (February 11, 1999). Thus, the Landry et al. reference is not prior art and is not a proper reference under 35 U.S.C. §103(a). Thus, Applicants respectfully request that this rejection be withdrawn.

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CONCLUSION

All grounds of rejection and objection of the Office Action of June 3, 2004, having been addressed, reconsideration of the application is respectfully requested. Should the Examiner believe that a telephone interview would aid in the prosecution of this application, Applicant encourages the Examiner to call the undersigned at (650) 846-5838.

Respectfully submitted,

Date: August 26, 2004

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